



WEST SANTA ANA BRANCH

Steering Committee

Alternative Analysis Process

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SOUTHERN CALIFORNIA
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Alternatives Analysis Process

AA planning process focuses on:

1. Purpose and Need/Mobility Problem – Define set of transportation needs in the study corridor
2. Modal Options – Identify alternative actions to address those needs
3. Evaluation – Develop information required to select a preferred project for implementation



Purpose and Need

Corridor Study Area described by following:

- Densely-developed, most active hearts of Los Angeles and Orange counties
- Population density is 2x Orange County and 5x Los Angeles County urbanized averages
- Population growth = +500,000 people (FY 2035)
- Employment growth = 44% of Orange County jobs and 29% of Los Angeles County jobs



Mobility Problem

Corridor's Mobility Problem described in terms of:

- **Transportation system constraints** – lacks system connections both within and beyond the Corridor
- **Freeway and arterial congestion** – today and in future, majority of Corridor's highway system operates at or beyond capacity during both peak travel periods
- **Limited travel options** – 92 to 96 percent of work trips are currently made by automobile, and will in the future



Development of Modal Alternatives

Identify alternative actions based on:

- Purpose and Need/Mobility Problem
- Study Goals and Objectives
- Travel Needs and Markets





Study Goals

Stakeholders/public told us:

- Make it a desirable solution for us to use
- Provide new travel option that connections to regional transportation system
- Increase access to our destinations/activity centers
- Serve both community and regional trips
- Provide fast travel speed
- Provide a cost-effective solution
- Support local economic development/ revitalization opportunities
- Minimize environmental impacts on adjacent communities



Travel Needs/Markets

Primary travel markets can be defined as:

- Commuters/employees
- Educational-based trips
- Medical facility-based trips
- Shoppers – residents/visitors
- Entertainment/cultural/special generator/
recreational trips – residents/visitors/tourists
- Convention centers/related hotel/dining/shopping/
entertainment activities





Modal Alternatives

Three groups of modal solutions:

1. Bus
2. Urban Rail
3. High Speed Service



Bus Alternatives

Rubber-tired solutions:

No • Local, limited stop, and express bus services

Maybe • Bus Rapid Transit (BRT)



Urban Rail Alternatives

Steel wheel on guideway solutions:

Maybe • Street car

Maybe • Light Rail Transit (LRT)

Maybe • Diesel Multiple Unit (DMU)

No • Rapid Transit/Heavy Rail

No • Monorail



High Speed Service Alternatives

Regional service solutions:

No • Commuter Rail

Maybe • Conventional Steel Wheel HSR

Maybe • Magnetic Levitation HSS



Initial Set of Alternatives

Recommended for further study through Initial Screening:

- Bus Rapid Transit (BRT)
- Street Car
- Light Rail Transit (LRT)
- Multiple Unit/Sprinter
- Conventional High Speed Rail
- Maglev High Speed Service

